



SUB-MICRO SERIES DYNAMIC BRAKING OPTION (FOR MODELS RATED 0.25 - 10 HP)

INSTALLATION AND OPERATION INSTRUCTIONS

Manual Number: SDBR06C

The Sub-Micro Series Dynamic Braking option can be used with all SM, SM-Plus and SM-Basic models.

⚠ WARNING!

Remove power from the drive and wait three minutes before wiring the DB module. Incorrect wiring of the B+ and B- terminals **will result in equipment damage!** The B+ terminal on the DB module must be connected to the B+ terminal on the Sub Micro drive, and the B- terminal on the DB module must be connected to the B- terminal on the Sub-Micro drive.

DO NOT make connections to R+ and R- without consulting LEESON. Damage to the Dynamic Braking module and/or drive may result.

SM-PLUS SERIES DRIVES

PROGRAMMING

1. Set Parameter 09 (TB-31 OUTPUT) to DYNAMIC BRAKING (04).
2. Set Parameter 10 (TB-13A FUNCTION) to DB FAULT (09), or set Parameter 12 (TB-13C FUNCTION) to DB FAULT (08).

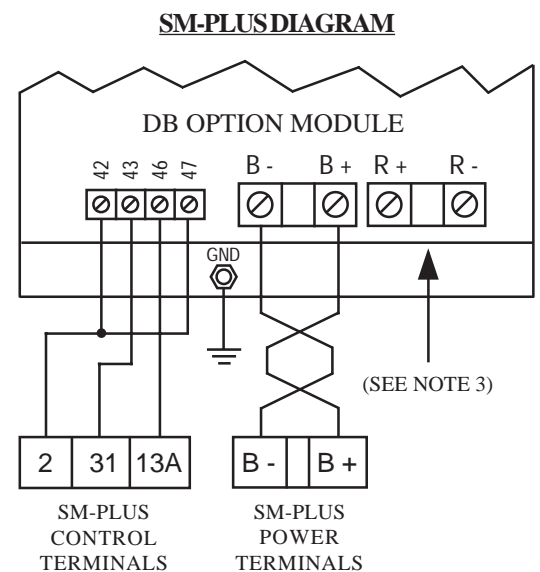
WIRING

The diagram to the right illustrates how the DB module is wired to the SM-PLUS Series drive. In this diagram, TB-13A is used as the DB FAULT input, but TB-13C could be used instead if TB-13A is required for another function.

NOTE 1: Use 18 AWG wire for control connections.

NOTE 2: Use minimum 14 AWG wire for connections to B+ and B-. The B+ and B- wires **MUST** be twisted together and must be less than 12 inches long.

NOTE 3: DO NOT make connections to R+ and R- without consulting LEESON. Damage to the Dynamic Braking module and/or drive may result.



SM SERIES DRIVES

PROGRAMMING

1. Set Parameter 12 (TB-13E FUNCTION) to DYNAMIC BRAKING (20).
2. Set Parameter 10 (TB-13A FUNCTION) to INVERSE EXT. FAULT (09), or set Parameter 11 (TB-13B FUNCTION) to INVERSE EXT. FAULT (10).

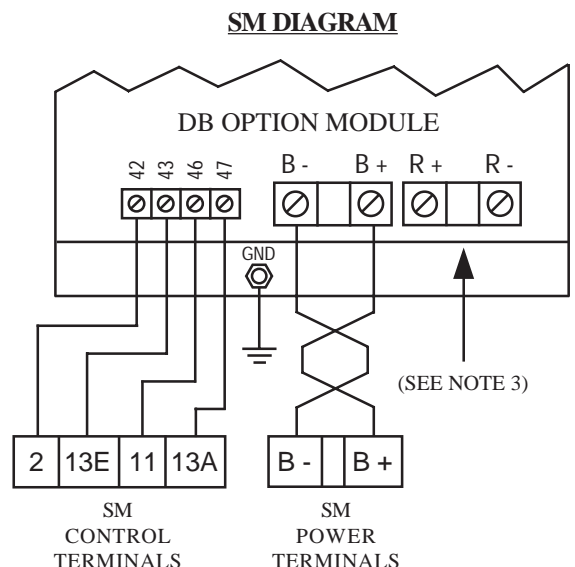
WIRING

The diagram to the right illustrates how the DB module is wired to the SM Series drive. In this diagram, TB-13A is programmed for INVERSE EXTERNAL FAULT, but TB-13B could be used instead if TB-13A is required for another function.

NOTE 1: Use 18 AWG wire for control connections.

NOTE 2: Use minimum 14 AWG wire for connections to B+ and B-. The B+ and B- wires **MUST** be twisted together and must be less than 12 inches long.

NOTE 3: DO NOT make connections to R+ and R- without consulting LEESON. Damage to the Dynamic Braking module and/or drive may result.



SM-BASIC SERIES DRIVES

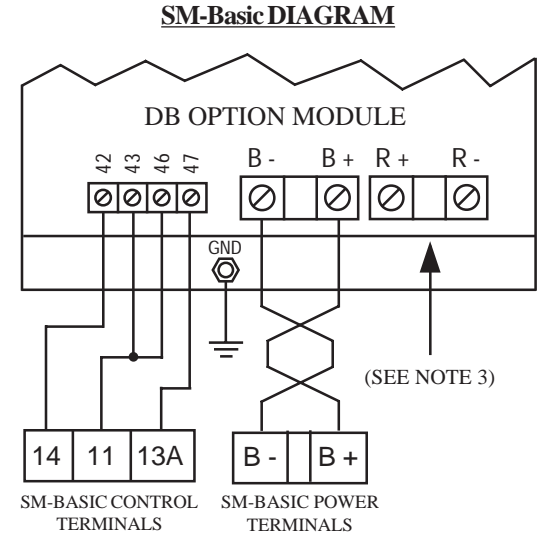
PROGRAMMING

1. Set Parameter 06 (TB-14 OUTPUT) to DB BRAKE (11).
2. Set Parameter 10 (TB-13A FUNCTION) to DB FAULT (08), or set Parameter 11 (TB-13B FUNCTION) to DB FAULT (08), or set Parameter 12 (TB-13C FUNCTION) to DB FAULT (07).

WIRING

The diagram to the right illustrates how the DB module is wired to the SM-Basic drive. In this diagram, TB-13A is used as the DB FAULT input, but TB-13B or TB-13C could be used instead if TB-13A is required for another function.

- NOTE 1:** Use 18 AWG wire for control connections.
- NOTE 2:** Use minimum 14 AWG wire for connections to B+ and B-. The B+ and B- wires **MUST** be twisted together and must be less than 12 inches long.
- NOTE 3:** **DO NOT** make connections to R+ and R- without consulting LEESON. Damage to the Dynamic Braking module and/or drive may result.

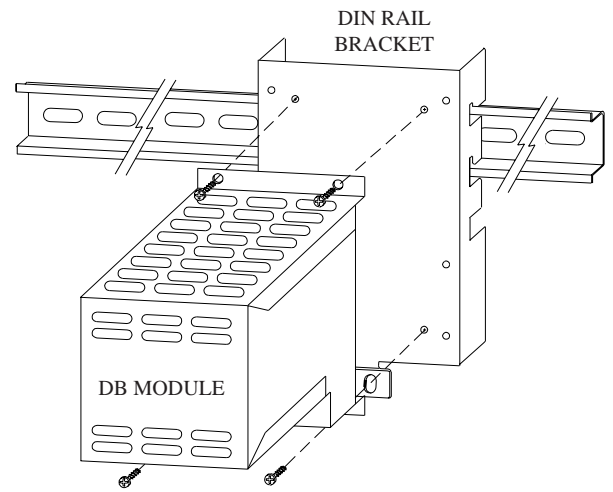


WARNING! SM-Basic control terminals are hot to ground! Do not touch!

MOUNTING THE DYNAMIC BRAKING MODULE

The diagram below illustrates how to mount the DB Module. The DB Module is compatible with the DIN Rail Mounting Kit option, or can simply be mounted to a flat surface such as an electrical panel.

The DB module is a heat producing device; **DO NOT** mount the DB module below the Sub-Micro Series drive! The DB module must be mounted above or to the side of the Sub-Micro Series drive.



DIMENSIONS (inches)		
HP	W	D
0.25 - 1.5	3.1	3.1
2 - 3	3.1	4.3
5	3.1	5.6
7.5 - 10	4.2	6.7

